

This listing of claims will replace all prior versions of claims in the application.

Claims 1-25. (cancelled).

Claim 26. (new) A photoresist composition that comprises:

- (a) a photoacid generator compound; and
- (b) a polymer that comprises (i) a hydroxyadamantyl moiety, (ii) a photoacid-labile moiety, and (iii) at least two distinct polymerized norbornene repeat units.

Claim 27. (new) The photoresist composition of claim 26 wherein the polymer comprises polymerized acrylate groups that comprise a photoacid-labile moiety.

Claim 28. (new) The photoresist composition of claim 26 wherein the polymer comprises a nitrile moiety.

Claim 29. (new) The photoresist composition of claim 26 wherein the polymer comprises an anhydride moiety.

Claim 30. (new) The photoresist composition of claim 26 wherein the polymer comprises a lactone moiety.

Claim 31. (new) The photoresist composition of claim 26 wherein the polymer comprises at least two distinct repeat units that each has a photoacid-labile group.

Claim 32. (new) The photoresist composition of claim 26 wherein the polymer is a terpolymer.

Claim 33. (new) The photoresist composition of claim 26 wherein the polymer is a tetrapolymer.

Claim 34. (new) The photoresist composition of claim 26 wherein the polymer is substantially free of aromatic groups.

Claim 35. (new) The photoresist composition of claim 26 wherein the polymer is completely free of aromatic groups.

Claim 36. (new) A microelectronic wafer substrate having coated thereon a layer of the photoresist composition of claim 26.

Claim 37. (new) A photoresist composition that comprises:  
(a) a photoacid generator compound; and  
(b) a polymer that comprises a hydroxyadamantyl moiety and at least two distinct repeat units that each has a photoacid-labile group.

Claim 38. (new) The photoresist composition of claim 37 wherein the polymer comprises a lactone group.

Claim 39. (new) The photoresist composition of claim 37 wherein the polymer comprises polymerized acrylate groups that comprise one or more photoacid-labile moieties.

Claim 40. (new) The photoresist composition of claim 37 wherein the polymer comprises one or more nitrile moieties.

Claim 41. (new) The photoresist composition of claim 37 wherein the polymer comprises one or more polymerized norbornene groups.

Claim 42. (new) The photoresist composition of claim 37 wherein the polymer is a terpolymer.

Claim 43. (new) The photoresist composition of claim 37 wherein the polymer is a tetrapolymer.

Claim 44. (new) The photoresist composition of claim 37 wherein the polymer is substantially free of aromatic groups.

Claim 45. (new) The photoresist composition of claim 37 wherein the polymer is completely free of aromatic groups.

Claim 46. (new) A microelectronic wafer substrate having coated thereon a layer of the photoresist composition of claim 37.